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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/799,815	03/12/2004	Lawrence J. Merboth	LUCW:0009	8379

7590  
Michael G. Fletcher  
Fletcher Yoder  
P.O. Box 692289  
Houston, TX 77269-2289

EXAMINER
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WENDELL, ANDREW

ART UNIT	PAPER NUMBER
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2618

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/27/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/799,815	<b>Applicant(s)</b> MERBOTH ET AL.	
	<b>Examiner</b> Andrew Wendell	<b>Art Unit</b> 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 01 December 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8-21 is/are rejected.
- 7) ☒ Claim(s) 7 and 22 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent; except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 6, 13, and 17-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Mantha et al. (US Pat Appl# 2004/0023622).

Regarding claim 1, Mantha et al. system for allocating power teaches a device for allocating power comprising a power sharing module configured to receive a plurality of signals corresponding to at least one predicted power allocation (Sections 0015-0017 and 0080 or 105 of Fig. 4) and at least one current power allocation 110 and 115 (Fig. 4) and to determine from the plurality of signals whether a first service system (voice service) corresponding to a first wireless service has un-utilized transmission power 115 and 120 (Fig. 4); and a scheduler of a second service system (data service) corresponding to a second wireless service configured to receive an indication to allocate the un-utilized transmission power from the first wireless service to the second wireless service and utilize the indication to allocate the un-utilized transmission power for the second wireless service 125 (Fig. 4, Sections 0008-0010 and 0057-0069).

Regarding claim 6, Mantha et al. teaches wherein the power sharing module provides the scheduler with the indication to allocate the un-utilized transmission power within a 2 power control group interval (Sections 0008-0010 and 0057-0069).

Regarding claim 13, Mantha et al. teaches providing a first wireless service system (voice service,  $V_{sub 1}$  to  $V_{sub V}$  of Fig. 1) and a second wireless service system (data service,  $D_{sub 1}$  to  $D_{sub z}$  of Fig. 1) for a plurality of wireless units 44 and 48 (Fig. 1); obtaining a plurality of input signals corresponding to a plurality of predicted transmission power allocations (Sections 0015-0017 and 0080 or 105 of Fig. 4) and a plurality of current transmission power allocations 110 and 115 (Fig. 4); determining from the plurality of input signals whether the second wireless service system may utilize transmission power from the first wireless service system 110 and 115 (Fig. 4); and allocating transmission power to the second wireless service from the first wireless service system for at least one communication channel based on an indication of transmission power that is un-utilized by the first wireless service system 110, 115, 120, and 125 (Fig. 4, Sections 0008-0010 and 0057-0069).

Regarding claim 17, Mantha et al. teaches wherein the plurality of wireless units comprises a plurality of cellular telephones (Sections 0046-0047).

Regarding claim 18, Mantha et al. teaches wherein the plurality of wireless units comprises at least one portable computer system (Sections 0046-0047).

Regarding claim 19, Mantha et al. teaches receiving a plurality of input signals corresponding to at least one predicted power allocation (Sections 0015-0017 and 0080 or 105 of Fig. 4) for a first wireless service system (voice service,  $V_{sub 1}$  to  $V$

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sub V of Fig. 1) and at least one current power allocation for the first wireless service system 110 and 115 (Fig. 4) and a second wireless service system (data service, D sub 1 to D sub z of Fig. 1); determining from the plurality of input signals whether non-utilized transmission power from the first wireless service system may be allocated to the second wireless service system 110 and 115 (Fig. 4); and providing an indication to allocate non-utilized transmission power from the first wireless service system to the second wireless service system to a scheduler 110, 115, 120, and 125 (Fig. 4, Sections 0008-0010 and 0057-0069).

Regarding claim 20, Mantha et al. teaches the act of allocating the non-utilized transmission power based on the indication to allocate non-utilized transmission power from the first wireless service system to the second wireless service system for transmissions to a wireless unit (Sections 0008-0010 and 0057-0069).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-5, 14-16, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mantha et al. (US Pat Appl# 2004/0023622) in view of Jeon et al. (US Pat Appl# 2004/0253928).

Regarding claim 2, Mantha et al. system for allocating power teaches the limitations in claim 1. Mantha fails to teach the first wireless service having CDMA200 1x service.

Jeon et al. power allocation method and apparatus for providing packet data service in mobile communication system teaches a wireless service comprises a CDMA2000 1x service (Section 0091).

Therefore, it would have been obvious at the time of the invention to one of ordinary skill in the art at the time the invention was made to incorporate CDMA200 1x service as taught by Jeon et al. into Mantha et al. system for allocating power in order to improve performance (Sections 0015-0016).

Regarding claim 3, the combination including Jeon et al. teaches a 1x system (Section 0091).

Regarding claim 4, the combination including Jeon et al. teaches a wireless service comprises a CDMA2000 1x evolution data and voice (EVDV) service (Section 0004).

Regarding claim 5, the combination including Jeon et al. teaches wherein the second service system comprises an EVDV system.

Regarding claim 14, the combination including Jeon et al. teaches a wireless service system comprises a CDMA2000 1x service (Section 0091).

Regarding claim 15, the combination including Jeon et al. teaches a wireless service comprises a CDMA2000 1x evolution data and voice (EVDV) service system (Section 0004).

Regarding claim 16, the combination including Mantha et al. teaches transmitting the at least one communication channel to at least one of the second portion of the plurality of wireless units (Sections 0044-0053).

Regarding claim 21, the combination including Jeon et al. teaches a wireless service comprises a CDMA2000 1x evolution data and voice (EVDV) communication channel (Section 0004).

5. Claims 8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mantha et al. (US Pat Appl# 2004/0023622) in view of Kang (US Pat Appl# 2001/0016503).

Regarding claim 8, Mantha et al. system for allocating power teaches a first baseband service (voice service) system that communicates with a first group of the plurality of wireless units 44 (Fig. 1) via a first plurality of communication channels (Fig. 1,  $V_{sub\ 1}$  to  $V_{sub\ V}$ ); and a second baseband service system (data service,  $D_{sub\ 1}$  to  $D_{sub\ z}$  of Fig. 1) that communicates with a second group of the plurality of wireless units 48 (Fig. 1) via a second plurality of communication channels, the second baseband service system comprising a power sharing module configured to receive a plurality of signals corresponding to a plurality of predicted power allocation (Sections 0015-0017 and 0080 or 105 of Fig. 4) and a plurality of current power allocations 110 and 115 (Fig. 4) and to determine from the plurality of signals whether the second baseband service system may allocate power from the first baseband service system 110 and 115 (Fig. 4); and a scheduler configured to receive an indication to allocate un-utilized transmission power to the second baseband service system from the first

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baseband service system and to utilize the indication to allocate un-utilized transmission power for the second plurality of communication channels 110, 115, 120, and 125 (Fig. 4, Sections 0008-0010 and 0057-0069). Mantha et al. fails to teach a channel card.

Kang's CDMA base station system teaches a radio frequency system having a channel card 103 (Fig. 1) configured to communicate with a plurality of wireless units 111 and 112 (Fig. 1).

Therefore, it would have been obvious at the time of the invention to one of ordinary skill in the art at the time the invention was made to incorporate a channel card as taught by Kang into Mantha et al. system for allocating power in order to minimize the deterioration of the call quality in a CDMA system (Section 0020).

Regarding claim 10, the combination including Kang teaches wherein the channel card comprises at least one transceiver 104 and 105 (Fig. 1) configured to communicate with the plurality of wireless units 111 and 112 (Fig. 1).

6. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mantha et al. (US Pat Appl# 2004/0023622) in view of Kang (US Pat Appl# 2001/0016503) and further in view of Hongo et al. (US Pat Appl# 2003/0022639).

Regarding claim 9, Mantha et al. system for allocating power in view of Kang's CDMA base station system teaches the limitations in claim 8. Mantha and Kang fail to teach determining a power average and instant power of a signal.



Hongo et al. peak limiter and multi-carrier amplification apparatus teaches a power system that determines a radio frequency output power average 11 (Fig. 3) and an instant radio frequency power 12 (Fig. 3).

Therefore, it would have been obvious at the time of the invention to one of ordinary skill in the art at the time the invention was made to incorporate determining a power average and instant power of a signal as taught by Hongo et al. into a channel card as taught by Kang into Mantha et al. system for allocating power in order to enhance the power efficiency (Section 0031).

7. Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mantha et al. (US Pat Appl# 2004/0023622) in view of Kang (US Pat Appl# 2001/0016503) and further in view of Jeon et al. (US Pat Appl# 2004/0253928).

Regarding claim 11, Mantha et al. system for allocating power in view of Kang's CDMA base station system teaches the limitations in claim 8. Mantha and Kang fail to teach a CDMA2000 1x service.

Jeon et al. power allocation method and apparatus for providing packet data service in mobile communication system teaches a wireless service comprises a CDMA2000 1x service (Section 0091).

Therefore, it would have been obvious at the time of the invention to one of ordinary skill in the art at the time the invention was made to incorporate CDMA200 1x service as taught by Jeon et al. into a channel card as taught by Kang into Mantha et al. system for allocating power in order to improve performance (Sections 0015-0016).

Regarding claim 12, Jeon et al. further teaches a wireless service comprises a CDMA2000 1x evolution data and voice (EVDV) service (Section 0004).

***Response to Arguments***

Applicant's Remarks	Examiner's Response
Regarding claims 1, 13, and 19, "The Mantha reference only discloses power allocation between two services, i.e., voice and data....Indeed, the data and voice services referred to in the Mantha reference are merely two separate services of a single system."	The same argument could be made for the applicant's invention as well. Block 10 in Fig. 2 of applicant's drawings shows one communication system as well. In section 0046 of Mantha it talks about how the first service system (voice) is directed to a subscriber system (i.e. telephone). The second service system (data) is directed to a computer system. Both voice and data are two separate systems and services which are intended to be used on two different systems.
Regarding claim 8, "In sharp contrast, the Manthra reference and the Kang reference, taken alone or in hypothetical combination, do not disclose allocation of un-utilized transmission power to a second baseband service system from a	See above response.

first baseband service system as set forth in claim 8.”	
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***Allowable Subject Matter***

7. Claims 7 and 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Wendell whose telephone number is 571-272-0557. The examiner can normally be reached on 7:30-5 M-F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 571-272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Andrew Wendell  
Examiner  
Art Unit 2618

2/16/2007



QUOCHIEN B. VUONG  
PRIMARY EXAMINER